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REMARKS

Claims 1, 2, 4 and 6-15 are pending in the Application.

Turning to the rejections presented in the Office Action, the Examiner maintains the rejections presented in the prior Office Action of September 9, 2004. Thus, Claims 1, 2, 4, 6, 7 and 13-15 were rejected under 35 U.S.C. §103(a) as unpatentable over "The IntelliMedia WorkBench A Generic Environment For Multimodal Systems", by Brondsted et al. in view of "Combining Audio and Video in Perceptive Spaces", by Wren et al. (Office Action ¶3). Claims 8-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Brondsted in view of Wren and further in view of "Toward Natural Gesture/Speech HCI: A Case Study Of Weather Narration" by Poddar et al. (Office Action ¶4). Claim 12 was allowed and Claim 11 was acknowledged in the Office Action as including allowable subject matter. (Office Action, ¶5, ¶6)

In addition, in paragraph 7 of the Office Action, the Examiner responds to a number of distinguishing arguments presented in the prior Reply Under 37 C.F.R. 1.111 mailed December 3, 2004 (received at the U.S. Patent & Trademark Office on 12/6/04).

It is maintained that the remarks given in the prior Reply distinguish the claims from the applied art. Applicants hereby incorporate in this current Reply all of the remarks made in the prior Reply, but for the convenience of the Examiner, Applicants

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will not repeat them here in detail. Instead, the focus will be placed on the most important and evident shortcomings given in the Office Action and, in particular, the Examiner's Response to Arguments given in paragraph 7.

The Examiner's Response asserts that Brondsted in view of Wren teaches the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target". (Office Action, ¶7 at p. 12) However, the ensuing points made in paragraph 7 of the Office Action fail to support that assertion.

For example, the Office Action states that "the [Brondsted Campus Information] system allows the user to ask questions about the location of persons and offices, labs, etc, then the system analyzes the question or the spoken word (via one or more modules, Fig. 2) and outputs the intended output ...". (Office Action, ¶7 at p. 13, lines 12-14) However, noting that one or more system modules analyze the spoken input does not support the Office Action's conclusion that "[t]he [Brondsted Campus Information] system therefore receives additional external information that characterizes at least one machine-sensible features of a target". (Id., lines 16-17)

It is important to note that as recited in Claim 1 the "additional external information" received "characterizes at least

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one machine-sensible feature of a target". The Examiner's assertion that Bronsted processes certain speech input by itself is not a showing that the speech input "characterizes at least one machine-sensible feature of a target", as recited in Claim 1. Absent from the Office Action's response is any assertion, for example, that the spoken words "Hanne" and/or "office" in some way characterize a feature of a target on the campus map of Fig. 1 that may be detected by a machine sensor. It is respectfully noted that Applicants have stressed these points during the prosecution. (See, e.g., 12/3/04 Reply, p. 4 (lines 11-14); 6/7/04 Appeal Brief, paragraph spanning pp. 4-5)

The Response to Arguments at page 13 (line 18) to page 14 (line 10) of the Office Action also attempts to demonstrate that Bronsted teaches the Claim 1 recitation "receiving additional external information that characterizes at least one machine-sensible feature of a target". However, this portion of the Response begins by noting that the Bronsted Campus Information system receives, for example, the spoken inquiry "show me Hanne's office" and that "[t]he inquires [sic] ... are analyzed and/or compared (via one or more modules, Fig. 2) with the pre-stored campus information, and the system retrieves and outputs the answer..." (Office Action, ¶7 at p. 13 (lines 18-21)) Thus, it appears this is simply a repetition of the point previously made

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in paragraph 7 of the Office Action that one or more system modules analyze the spoken input, not a showing that the speech input characterizes at least one machine-sensible feature of a target on the campus map.

Focusing further on this portion of the Response to Arguments, it is briefly noted that it also includes a number of additional unsupported or unclear statements: For example, the Office Action asserts that spoken inquiries such as "show me Hanne's office" are "characteristic or attribute feature of a target". (Office Action, ¶7 at p. 13, line 19) As noted, however, the Office Action fails to show how such spoken input characterizes a machine-sensible feature of a target on the campus map of Brondsted.¹ In addition, the Office Action asserts that the way in which rooms and offices are described in the Domain Model module of Brondsted teaches machine-sensible features of a target. (Office Action, ¶7 at p. 14, lines 1-5) How this is taught by the Domain Model module is unexplained and incomprehensible, and it is also not clear how this assertion is intended to relate to the pertinent recitations of

¹ In particular, the Office Action fails to show how such speech input characterizes a feature of a target on the campus map of Fig. 1 when individual offices are not visible. Distinguishing arguments related to this point have previously been raised by Applicants. (See 12/3/04 Reply (p. 4, last sentence) and 6/7/04 Appeal Brief (p. 10, lines 3-6))

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Claim 1.²

Accordingly, the Office Action fails to show that Brondsted in view of Wren teaches or suggests the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target". For at least this reason, the Office Action fails to present a *prima facie* case of obviousness with respect to Claim 1 at least under MPEP 2143.03. Paragraph 3 of the Office Action relies upon the same aspects of Brondsted with respect to the Claim 13 recitation of "inputting further information about a machine-sensible characteristic of said target". Claim 13 is traversed using like reasoning as given for Claim 1. Reconsideration and allowance of independent Claims 1 and 13 is respectfully requested.

As noted, independent Claim 14 was also rejected in the Office Action as unpatentable over Brodsted in view of Wren. Claim 14 recites among other things "inputting spatial information to indicate a position of a target", where the spatial information "includes sensing a gesture indicating a direction of said target". Claim 14 also recites "inputting further information about said target" which may, for example, comprise speech input about the target. Claim 14 also recites orienting an instrument with respect

² The Office Action also does not attempt to reconcile its assertion with the pertinent processing of the Domain Model module as summarized in the sentence spanning pages 9-10 of the 6/7/04 Appeal Brief.

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to the target to acquire the target in response to both the spatial and further information "to reduce an ambiguity in said position" of the target.

The Office Action now points to the last paragraph of page 5 of Wren as purportedly teaching the Claim 14 recitation "to reduce an ambiguity in said position". (Office Action, ¶3 at p. 8 (lines 13-15) and ¶7 at p. 15 (lines 4-8)) The cited portion of Wren, however, refers to use of visual cues to activate the speech system, as well as use of speech to disambiguate gestures. The Office Action still fails to show at least the Claim 14 recitation of orienting an instrument with respect to the target to acquire the target in response to both spatial and further information "to reduce an ambiguity in said position" of the target.

For at least this reason, the Office Action fails to present a *prima facie* case of obviousness with respect to Claim 14 at least under MPEP 2143.03. Reconsideration and allowance of independent Claim 14 is respectfully requested.

Dependent Claims 2, 4, 6, 7 and 15 were also rejected in paragraph 3 of the Office Action as unpatentable over Brondsted in view of Wren. Without conceding the patentability *per se* of dependent Claims 2, 4, 6, 7 and 15, they are distinguishable from Brondsted in view of Wren at least by virtue of their dependency on

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their respective independent claim. Reconsideration and allowance of Claims 2, 4, 6, 7 and 15 is respectfully requested.

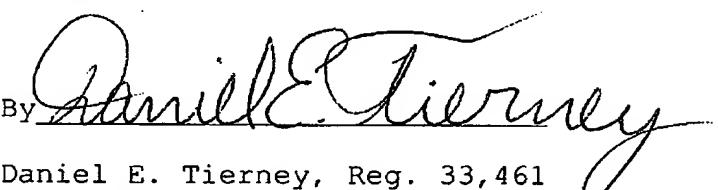
As noted above, dependent Claims 8-10 were rejected in paragraph 4 of the Office Action as unpatentable over Brondsted in view of Wren and further in view of Poddar. Poddar is not cited for curing any of the deficiencies of Brondsted and Wren described above with respect to independent Claim 1. Accordingly, without conceding the patentability per se of dependent Claims 8-10, the Office Action fails to present a prima facie case of obviousness with respect to Claims 8-10 at least by virtue of their dependencies on independent Claim 1. Reconsideration and allowance of Claims 8-10 is respectfully requested.

It is again gratefully noted that Claim 12 is allowed and Claim 11 is acknowledged as having allowable subject matter. However, in view of the above remarks, it is submitted that all of the pending claims in the Application, namely Claims 1, 2, 4 and 6-15, are in shape for allowance. Accordingly, allowance is

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respectfully requested. Should the Examiner believe that a telephone conference would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

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